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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,114	03/02/2004	Robert A. Pyles	Mo-6825D / MD-01-039D	2664
157	7590	08/11/2004	EXAMINER	
BAYER MATERIAL SCIENCE LLC 100 BAYER ROAD PITTSBURGH, PA 15205			EINSMANN, MARGARET V	
			ART UNIT	PAPER NUMBER
			1751	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/791,114	Applicant(s) PYLES ET AL.	
	Examiner Margaret Einsmann	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1 and 22-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1 and 22-36 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/2/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10, 22, 23,26 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukuda et al., US 5,182,169. The paragraph bridging col 9 and 10 discloses a composition coated on a polyester or polyurethane resin comprising phthalocyanine blue (which is a disperse dye), butyl cellosolve or butyl carbitol, which are both included in applicant's carrier, and titanium dioxide.

Claims 10, 22,23, 25, 29-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoshiyama, US 5,560,751. Hoshiyama discloses the formation of a dye coating comprising butyl cellosolve (applicant's carrier), a surfactant , FC-431, and a disperse dye (col 6 lines 63-67). He then coats those components onto an aromatic polycarbonate lens substrate (CR-39) . See col 7 lines 34-40. When the coating is dried, a dyed molded article is obtained.

Claims 10, 22,23,25,27-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Shawcross et al., US 6,028,180 See example 7 (col 16) which defines

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DMB as diethyleneglycol monobutyl ether, applicant's carrier, and Table 5 at the top of col 17-18. The disperse azo dye of patentee's invention is formulated into an ink comprising a polyester resin, DMB, surfactant and water. See the last 9 examples. The fourth example from the bottom comprises the surfactant.

Claim 29 is rejected under 35 U.S.C. 102(b) as being anticipated by Lang, US 4,025,301.

Example q in column 21 comprises butyl cellosolve, water and an azo dye.

There are examples in each US patents 4,150,997, US 3, 870,528, US 3,931,033 which anticipate claim 29.

Claims 29,31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Vanlerberghe et al., US 4,294,728. Example 9 in col 19 comprises an ionic surfactant, sodium N-lauryl-beta-iminodipropionate, water, disperse azo dye, C.I. disperse Yellow 3 (11855), and butoxy-2-ethanol. Accordingly the claims are anticipated.

Claims 29 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Carumpalos et al., US 4,163,001. A basic dye is dissolved in butyl carbitol. Subsequently water is added. See col 2 lines 29-37.

Claims 10,22-25,29-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Schafer et al., GB 1,559,627. Example 8 on page 11 lines 8-15 anticipates these claims, a polyester/cotton fabric is impregnated with a padding liquor comprising an anionic surfactant, diethylene glycol butyl ether, a disperse dye and water. The padding liquor anticipates claims 29-33. The polyester fabric comprises polyester fibers, which are molded articles. When the dye mixture is padded onto said polyester/cotton fabric, claims 22-25 are anticipated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shawcross et al. or Hoshiyama or Fukuda.

All three of the above patents are relied upon as set forth in the above rejections as teaching a composition comprising the components claimed in claim 10 and a surfactant. See above rejections and examples within the cited patents. Shawcross et al. and Hoshiyama both use nonionic surfactants. Fukuda is silent as to the type of surfactant he includes in his coating composition. It would have been obvious to the skilled artisan to use one of the surfactants claimed in claim 24 in the compositions of

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the above three references because surfactants are used for the purpose of emulsifying and reducing surface tension, and those claimed are functional equivalents to those in the references absent evidence to the contrary.

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dudley, US 4,089,765. Dudley discloses a composition consisting of 1% dye, 2.5% butyl cellosolve and water. See col 5 lines 63-68. This composition would anticipate the claimed composition if it contained .5% more butyl cellosolve or .5% more dye. Accordingly it would have been obvious to the skilled artisan to formulate the composition as claimed because it would be approximately equivalent to the composition as disclosed. Adding more dye will give a more intense color; adding slightly more cellosolve will increase the solubility of the coupling ability of the solvent.

Claim 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shawcross et. al or Schafer et al. or Vanlerberghe.

Each of the above three references is relied upon as set forth in the above rejections as disclosing aqueous compositions comprising applicant's claimed carrier combined with disperse dyes, including azo disperse dyes. None of the above references disclose the composition as claimed wherein water is present in an amount of 94-96 percent by weight. The above references teach that said carriers are water miscible organic solvents with the utility of forming dispersions of disperse dyes in water. It would have been obvious to the skilled artisan to formulate the composition as

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claimed using any amount of water and carrier and a small amount of dye since it is not inventive to mix water with a water miscible solvent, and the above three references teach the addition of a small amount of dye to said solvent mixture. Regarding the addition of a dye to said mixture, the three references above all add dye to a mixture of said carrier and water.

Applicant is advised to update the status of the parent application on page one of the specification.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret Einsmann whose telephone number is 571-272-1314. The examiner can normally be reached on 7:00 AM -4:30 PM M-Th and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Margaret Einsmann
Primary Examiner
Art Unit 1751

August 6, 2004